

Interview Summary	Application No. 10/522,647	Applicant(s) KRUSZYNSKI ET AL.	
	Examiner Erica E. Cadugan	Art Unit 3722	

All participants (applicant, applicant's representative, PTO personnel):

(1) Erica E. Cadugan.

(3) _____.

(2) Mr. Brian Tumm.

(4) _____.

Date of Interview: 11/30/06 & 1/5/07.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: _____.

Claim(s) discussed: 1 and 9-20.

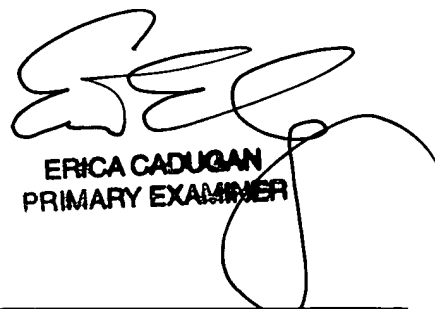
Identification of prior art discussed: U.S. Pat. No. 4,558,975 to Hale.

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.


ERICA CADUGAN
PRIMARY EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiner's Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Examiner proposed the attached Examiner's Amendment. Applicant indicated that the proposed changes to claim 1 were acceptable. Applicant asked if incorporating claim 18 into claim 15 instead of incorporating the language set forth in the attached proposal would be acceptable. Examiner indicated that such a change (to incorporate claim 18 into 15) would be acceptable. However, an agreement could not be reached regarding independent claim 9 at this point. Applicant asked if incorporating claim 12 into claim 9 would be acceptable, but Examiner indicated that the Hale reference would still read on such a claim. Applicant indicated that they would rather receive an action at this point as no agreement regarding claim 9 was reached. Thus, it is noted that no changes were made to the claims beyond the amendment filed by Applicant on 6/29/2006.



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A ATTACHMENT TO
INTERVIEW
SUMMARY

Fax Cover Sheet

Date: 30 Nov 2006

To: Brian Tumm	From: Erica E. Cadogan
Application/Control Number: 10/522,647	Art Unit: 3722
Fax No.: (269) 381-5465	Phone No.: (571) 272-4474
Voice No.: 269-381-1156	Return Fax No.: (571) 273-8300
Re: dkt W&L Case 101	CC:
<input checked="" type="checkbox"/> Urgent <input checked="" type="checkbox"/> For Review <input type="checkbox"/> For Comment <input checked="" type="checkbox"/> For Reply <input type="checkbox"/> Per Your Request	

Comments:
Proposed Examiner's Amendment.

Number of pages 6 including this page

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ATTACHMENT TO
INTERVIEW
SUMMARY

Proposed EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with *** on ***.

The application has been amended as follows:

Claim 1 (Currently Amended). A drilling tool for machine tools, having a drill bit body and at least two inserts which are arranged at a radial distance from one another in insert seats of the drill bit body in a region of respective chip flutes, the inserts project with their front-end main cutting edges axially beyond the drill bit body and radially overlap one another in their active regions, a radially outer insert of said at least two inserts has an outer insert corner and an adjoining secondary cutting edge projecting radially beyond the drill bit body, and the secondary cutting edge, starting from the insert corner, being inclined at a defined setting angle (α_a) in its longitudinal extent in the direction of the drill bit body, wherein the front-end main cutting edge of the outer insert is subdivided in its longitudinal extent into a radially inner working section and a peeling section adjoining said working section on the outside and extending up to the outer insert corner, said working and peeling sections enclosing an angle of 95° to 110° with one another.

Claims 9-14 have been canceled.

Claim 15 (Currently Amended). A drilling tool for machine tools comprising:

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a drill bit body having at least two insert seats and chip flutes opening axially at an end face thereof;

an inner insert mounted in one of said insert seats and having a front-end main cutting edge projecting axially beyond the end face of the drill bit body; and

a radially outer insert mounted in another one of said insert seats and having a front-end main cutting edge projecting axially beyond the end face of the drill bit body and an adjoining secondary cutting edge projecting radially outwardly beyond the drill bit body, the front-end main cutting edge and the secondary cutting edge meeting at an outer insert corner of said outer insert, the secondary cutting edge starting from the insert corner being inclined at a defined setting angle (α_a) along the length thereof, and to permit burr-free through drilling the front-end main cutting edge of the outer insert is subdivided along the length thereof into a radially inner working section and a peeling section, the peeling section adjoining the working section and extending radially outwardly to the outer insert corner, and wherein the working and peeling sections enclose an angle of 95 degrees to 110 degrees.

Claim 16 has been canceled.

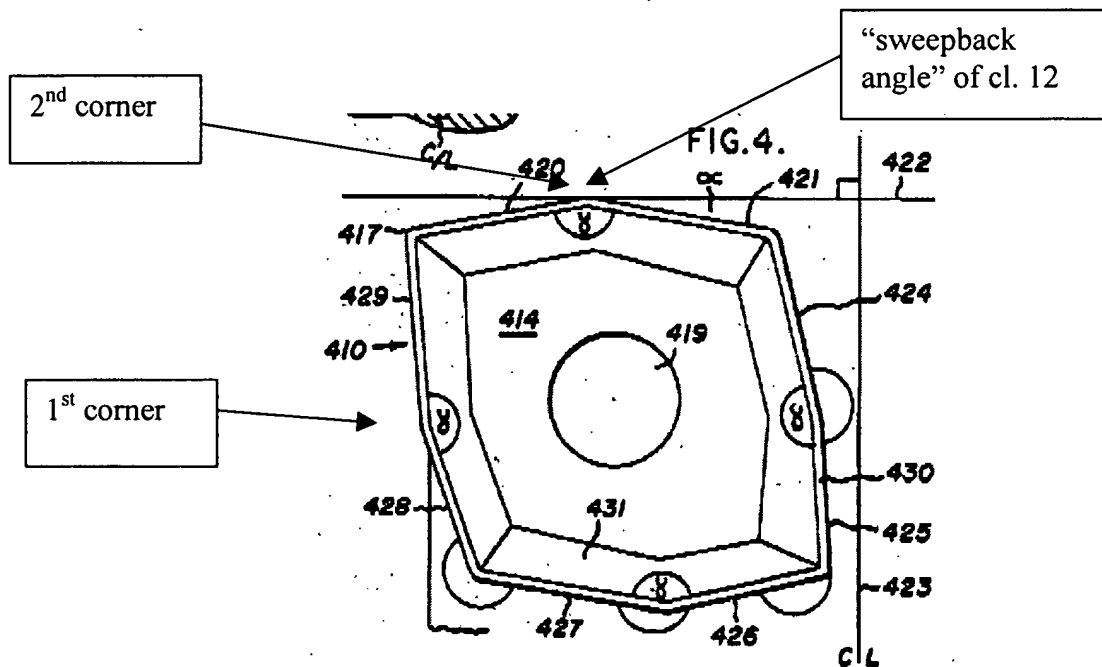
Claim 17 (Currently Amended). The drilling tool of claim [16] 15, wherein the working section of the main cutting edge toward the peeling section is set at a positive setting angle of 2 degrees to 10 degrees relative to the end face of the drill bit body.

Claim 18 (Currently Amended). The drilling tool of claim [16] 15, wherein the peeling section toward the outer insert corner is set at a positive setting angle of 72 degrees to 87 degrees relative to the end face of the drill bit body.

19. (Currently Amended) The drilling tool of claim [16] 15, wherein a transition point between the working section and the peeling section of the outer insert is rounded off convexly.

20. (Currently Amended) The drilling tool of claim [16] 15, the outer insert including a central section adjoining the working section and extending radially inwardly to an inner insert corner, the central section enclosing a sweepback angle of 160 degrees to 175 degrees with the working section and being set at a negative setting angle of 3 degrees to 18 degrees relative to the end face of the drill bit body.

Re claims 9-15, Examiner notes that U.S. Pat. No. 4,558,975 to Hale appears to be applicable to these claims as submitted in the June 29, 2006 amendment.



For example, with respect to claim 9, it is noted that insert 114, corresponding to insert 414 shown in the reproduction of Figure 4 above, is an “outer” (in this case, radially outer) insert of the drilling tool 110, as shown in Figure 1, see also col. 2, lines 64-65 which explicitly states “[T]he insert 414 shown in FIG. 4 is the outer insert of the drill”.

Note also that as claimed, the combination of 429 and 420 can be considered to form the “main cutting edge” of claim 9, extending between “first” and “second” corners as labeled above. Furthermore, cutting edge 428 constitutes the claimed “adjacent secondary cutting edge” which adjoins the “first insert corner” as claimed. Also, the “main cutting edge” 429+420 is “subdivided” in its longitudinal extent into a first section 421, which constitutes the claimed “rectilinear working section”, and a second section 429, which constitutes the “adjoining rectilinear peeling section”.

While it is noted that the Applicant has asserted that Hale does not mention the term “peeling”, and thus does not explicitly teach that edge 429 is used as “peeling” section, Examiner notes that Hale does describe the edge 429 as a cutting edge, and thus, the edge 429 is capable of performing the claimed function of “peeling”, thus meeting the claim limitation.

Regarding the claimed angle between the “peeling section” 429 and the “working section” 421, note that Hale explicitly teaches that corner 417 is “usually about 95 degrees” (see col. 3, lines 20-23), thus meeting the claim limitation.

Re claim 10, it is noted that the corner 417 appears in at least Figure 4 to have be “rounded off convex convexly”.

Re claim 11, it is noted that in the region of the above-labeled “first insert corner”, the “peeling section” 429 and the “adjacent secondary cutting edge” 428 enclose an angle of gamma, which is preferably 160 degrees and can vary up to 170 degrees, thus meeting the claim language (see col. 3, lines 10-13).

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Similarly, re claim 12, note that the angle so labeled above can be considered the claimed sweepback angle, and that again, Hale explicitly teaches a value between 160 and 170 degrees (col. 3, lines 10-13), thus meeting the claim.

Re claim 13, note that the insert is indexable, and is arranged as claimed (see Figure 4 and col. 4, lines 1-19, for example).

Re claim 14, see Figure 4 and the angle that peeling section 429 makes with the vertical, for example.

Re claim 15, note the two insert seats shown in Figure 1 for receiving inserts 114 and 115, and also note that the front main cutting edge(s) of insert 115 are shown in Figure 1 extending axially beyond the end face of the drill bit body, the front main cutting edge(s) of insert 114 are shown in Figure 2 as extending beyond the drill bit body, the radially outer insert 114 projects radially outwardly beyond the drill body (Figure 1, col. 2, lines 41-59).

With respect to claim 15, it is noted that cutting edges 420, 421 can be considered to form the peeling section and the radially inner working section, respectively, and that the cutting edge 429 can be considered to form the "secondary cutting edge", for example. Note also that secondary cutting edge 429 is inclined in the length direction thereof as shown in Figure 4, for example.

Re the whole, "permitting of burr-free drilling", it is noted that this is considered to be an inherent property of the cutting tool according to Hale insofar as Hale's cutting tool has cutting edges of the claimed configuration, i.e., subdivided...etc.